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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,063

12/09/2003

Anand Rajagopalan

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05/19/2006

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EXAMINER

VIDWAN, JASJIT S

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,063	RAJAGOPALAN ET AL.	
	Examiner	Art Unit	
	Jasjit S. Vidwan	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/28/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims ~~1-20~~^{1, 3, 10-13,} rejected under 35 U.S.C. 102(b) as being anticipated by Boucher et al U.S. Patent No: 6,334,153 [herein after Boucher].

3. As per claims 1, 10 and 17, Boucher teaches a system for uploading frame data to system memory, the system comprising:

(a) CPU coupled to the system memory and configured to execute an application program [Col. 5, Lines 10-24].

(b) Hardware configured to process frames to produce frame data [Col. 2, Lines 60-67, "processing bits of incoming network data"] and upload the frame data to a portion of system memory allocated to the application program [Col. 3, Lines 56-62, *The Fast-path method delivers data directly to intended destination which is the Application Program*]

4. As per claims 2 and 11, Boucher teaches a system wherein the frame data is payload data [Col. 2, Lines 60-67, *data without headers*]

5. As per claims 3 and 12, Boucher teaches a system wherein a TCP Stack [Col. 6, Lines 22-38, data handled by TCP protocols, therefore TCP stack handles fast-path data] provides the hardware with a physical address corresponding to a user buffer [Col. 18, Lines 61-63]

6. As per claim 13, Boucher teaches a system wherein the portion of system memory is a user buffer [Col. 3, Lines 56-62].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 5, 6, 7, 8, 9, 14, 15, 16, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher and further in view of Applicant Admitted prior art **[herein after AAPA]**.

9. **As per claims 4, 5, 6, 7, 14, 15 and 16**, Boucher teaches the limitations of claims 1, 10 and 17. Boucher further teaches a method for slow-path processing which is the conventional method of transferring and processing data where the frame data is moved to a secondary storage prior to being processed by the Host. However, Boucher does not explicitly teach system wherein the hardware is configured to process frames to produce partially processed frame data and further uploading the partially processed frame data to a portion of system memory allocated to a software driver. However, AAPA teaches a system wherein the hardware is configured to process frames to produce partially processed frame data and further uploading the partially processed frame data to a portion of system memory allocated to a software driver **[See Background of Invention, Paragraph 0006]** which is the conventional method of transferring and processing data.

It would have been obvious for one of ordinary skill in the art at the time of Applicant's invention to combine the teachings of Boucher with that of AAPA in order to take advantage of having a⁴ dual option for the microprocessor and the host to intelligently choose whether a given message or portion of a message is processed by fast-path or slow-path **[Col. 4, Lines 5-10]**. It is for this reason that one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine the two teachings in order to take advantage of having a dual option for the microprocessor and the host to

intelligently choose whether a given message or portion of a message is processed by fast-path or slow-path [Col. 4, Lines 5-10].

10. **As per claims 8, 18, 19 and 20**, teachings of Boucher as modified by AAPA teach a system wherein a software driver provides the hardware with a tag corresponding to a location of the legacy buffer [See Background of Invention, Paragraph 0006]

11. **As per claim 9**, teachings of Boucher as modified by AAPA teach a system wherein the hardware is configured to transmit the tag to the software driver [See Background of Invention, Paragraph 0006].


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasjit S. Vidwan whose telephone number is (571) 272-7936. The examiner can normally be reached on 8am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM HUYNH can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSV
5/10/2006


KIM HUYNH
SUPERVISORY PATENT EXAMINER
5/14/06